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Original Communications.

SERIOUS PATHOLOGICAL CHANGES IN MYOPIE EYES.

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I HAVE lately had under my notice four cases, where eyes, which had previously been merely included in the category "near-sighted," not only became blind, in consequence of separation of the retina, but were afterward the seat of still further changes—the formation of cataract, and, in one instance, the establishment of irido-choroiditis, which gave rise to symptoms of sympathetic irritation in the other eye. All these serious results could be directly traced to the progressive increase of the previous myopic conditions of the fundus of the eyeball. As they supervened, in every instance, without any suspicion, on the part of the patient, that the eyes were being used imprudently, and without any warning of impending danger, I think these specimen cases worthy of being brought to the notice of the profession, as showing how grave may be the ultimate consequences of over-use of near-sighted eyes.

CASE I.—A young lady, from New Brunswick, consulted me March 30, 1874. Ever since her early school-days, she had been highly myopic; but considered her eyes "very strong," and used them excessively. Some months ago, she observed a sudden obscurity, quickly going on to complete blindness in one eye. At first, the field of the pupil was clear, but cataract was gradually developed. More recently, the eye had become sensitive to touch, and occasionally painful, with considerable injection of the ciliary region. The other eye now shows distinct signs of sympathetic irritation, threatening to become sympathetic ophthalmia and destroy the sight. This eye, also, is exceedingly myopic, showing, with the ophthalmoscope, very large, posterior staphyloma around the optic nerve entrance. Its acuteness of vision is very much lessened, partly, no doubt, from the beginning of sympathetic ophthalmia. The fundus of the blind eye could not be seen with the ophthalmoscope, on account of the cataract; but sufficient appearance of fluctuating folds behind the lens could be made out, to prove the existence of retinal separation. The lens had been somewhat pushed forward, as in glaucoma, and was shrunken in size, and to this displacement, with the extensive detachment of the retina, must be attributed the inflammation in the iris and ciliary region.

Immediate removal of the disorganized globe was advised, to preserve the other eye from the threatened danger. The best results followed the operation, all morbid symptoms soon subsiding in the opposite eye.

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Section of the enucleated eye showed complete separation of the retina, except at its attachment around the entrance of the optic nerve. It was compressed into a mere cord, extending from the optic disc to the posterior surface of the crystalline lens. The lens had become almost cretaceous, and its pressure against the iris and ciliary body had been similar to that produced by any foreign substance.

CASE II.—Miss —, of New Orleans, consulted me August 3d, 1874. She had been an ambitious teacher, and used her eyes continually for small objects, believing, as her eyes were near-sighted, she "could do anything with them." In January, 1873, she struck her left eye, in tearing a sheet of paper. Had some pain, and soon noticed dimness of sight. Some time after this, opacity of the lens was seen.

Her condition is as follows: The cataract of left eye seems swollen, and pressed forward against the iris, appearing, at first sight, as if the capsule had been torn. The deeper parts of the eye could not be seen with the ophthalmoscope; but the history of the case and the very slight perception of light indicated separation of the retina as having preceded the formation of the cataract.

In the right eye, vision was good for reading and writing, though at times she had great pain. It was myopic $\frac{1}{2}$, and the ophthalmoscope showed a large, posterior staphyloma, and some floating opacities in the vitreous.

The advice given was that no operation should be performed while the left eye remained quiescent, as the disorganized condition of the deeper structures forbade the hope of any restoration of vision after the removal of the cataract. Great care was enjoined in the use of the other eye, that no fresh congestion should increase the changes already present. In case of any injection or tenderness of the left eye, no time should be lost before seeking advice.

After obtaining my opinion, the patient informed me that she had been under the care of Dr. Pope, of New Orleans, and that he had seen the separation of the retina soon after its occurrence, and had also observed turbidity of the vitreous, before these parts had become hidden by the lenticular opacity in the left eye.

The aspect and position of the lens in the left eye are such as threaten further mischief, and it is not improbable that the enucleation of this globe may become a necessity at some not very distant time.

In the other two cases to which I refer, the patients have been under my own observation during all the sequence of morbid changes.

CASE III.—A gentleman, upwards of 50 years of age, had been exceedingly myopic, but had never had reason to give his eyes an anxious thought, and had congratulated himself on their supposed excellence. His business required their constant use for minute work. Suddenly, one-half the field of vision in his left eye became obscured, and, in about twenty-four hours, its sight was nearly lost.

I found extensive staphyloma in both eyes, and in the left an almost complete separation of the retina. After an interval of several months, cataract formed in this eye; but, as yet, no other symptoms have been developed by its presence.

CASE IV.—A gentleman, of middle age, devoted to literary pursuits, had, for a long time, worn concave glasses of very high power, and was conscious that they gave him less and less assistance. A slight blow on his left eye, followed by pain and increased dimness of sight, led him to ask my advice.

Separation of the retina, to one-half its whole extent, could be perceived in his left eye. In addition to a very large, double posterior staphyloma, he had, in both eyes, considerable floating vitreous opacities, and greatly-diminished acuteness of vision. These changes were so considerable that the utmost care on his part has not sufficed to prevent their going on in a progress from bad to worse. The retinal separation has become complete, and cataract has formed in his left eye. In the right, an increase of the staphyloma, and of the floating filaments in the vitreous, and an effusion in the region of the macula lutea, have still further impaired his vision.

The fact that these and other lamentable results of progressive myopia are of so frequent occurrence, should induce the profession to interpose a word of warning, especially as regards near-sighted children, against the so general abuse of their eyes in excessive study.

A CASE OF CEREBRO-SPINAL MENINGITIS, ENDING IN RECOVERY.

By WILLIAM OSGOOD, M.D., of Boston.

IDA —, aged three years, became suddenly ill on the 30th of May, 1872. Although she had not seemed very well for a day or two, the first indication of serious illness was a convulsion on the morning of May 30th. I saw her soon after the convulsion. The face was flushed, skin hot, pulse 146, temperature $101\frac{1}{2}^{\circ}$. A dose of santonin and calomel was ordered—four grains of each—on the suspicion that the convulsion was caused by worms.

May 31st.—No more convulsions. Bowels moved freely, but no signs of worms. Pulse 100; temperature $99\frac{6}{10}^{\circ}$; skin moist; urine scanty and dark; general hebetude, with occasional twitching of the muscles. Ordered potass. bromid., gr. iv., every third hour.

June 1st.—Pulse 92; temperature $99\frac{1}{2}^{\circ}$. The torpor is now broken by uneasiness and screaming at short intervals, the shrieks being very loud and piercing.

June 2d.—Worse in every respect; constantly screaming and tossing about; shows no signs of intelligence. Impossible to take pulse or temperature. Bromide increased to four grains per hour, and tincture of ergot, gtt. x., every hour.

June 3d.—Worse. Twitching, restlessness and screaming continue, with strong opisthotonos. Ordered the ergot to be continued and the bromide to be increased to six grains per hour, and a blister, two by six, over the lower cervical and upper dorsal spine.

June 4th.—Blister well filled. Spasm less; more quiet; free perspiration for the first time since attack.

June 5th.—Improving. Head drawn back a little, but can be brought forward without causing pain. Pulse 120; temperature $99\frac{1}{2}^{\circ}$. Takes a little liquid food.

June 6th.—Had a very comfortable night; no spasm, and seems brighter and more intelligent. Eats freely of light food. Pulse 120; temperature $101\frac{7}{10}^{\circ}$.

June 7th.—Improving. Pulse stronger and the case presenting a much more promising aspect. The bromide and ergot have both been

continued, but with less frequency since the improvement commenced. She gets them now about once in eight hours.

June 8th.—Not so well; less appetite; head drawn back a little; pain in back of neck.

June 9th.—Appetite better than yesterday, but general condition not so good; feverish; pulse 120; temperature $103\frac{1}{10}^{\circ}$; head drawn back; very restless.

June 10th.—Had a restless night, but seems better this morning; mouth and tongue sore; lips and teeth covered with sordes. To stop the ergot and bromide, and have wine, $\mathfrak{z}\text{i.}$, tinct. opii, gtt. vi., in starch water, per enema.

June 11th.—Head still drawn back. Free perspiration, commencing soon after the injection; less thirst; takes less food (owing probably to soreness of mouth); pulse 130.

June 12th.—Not as well. Restless, with screaming spells; head drawn back.

June 13th.—Worse. Restless, screaming frequently. Am unable to take pulse or temperature. Ordered tinct. opii deodorata, gtt. x. p. r. n., till some quieting effect was produced.

June 14th.—Slept some during the night, after two or three doses of the opium, and seems torpid this morning. Takes no food. Skin generally dry and harsh; thirsty; pulse 120; temperature 101° .

June 15th.—About the same.

June 16th.—About the same, torpor and restlessness alternating with each other; head constantly drawn back, and the whole condition of the patient very unfavorable. The urine is scanty and high colored, I should judge, though it is not possible to collect any for examination; the odor is strongly ammoniacal. This has been the condition generally throughout the disease, but the bowels have acted daily, and frequently three or four times a day, from the first. She takes no food, excepting a little milk and water or a very little beef-tea. Ordered chloral hydrate, gr. x., tinct. opii, gtt. x., to be given per enema.

June 17th.—Took chloral and opium at 12, M., yesterday, and at 12, P.M., and has slept most of the time; takes beef-tea and but little food. Very comfortable. Temperature 100° .

June 18th.—Took chloral and opium at 8, P.M., yesterday, and slept well; takes very little food. Pulse 144; skin cool; free perspiration yesterday P.M.

June 19th.—Had chloral and opium once last night and slept well. Appears better. Pulse 110. Temperature $99\frac{1}{4}^{\circ}$.

June 22d.—Takes less food and does not seem as well. Sleeps well with chloral and opium once in twenty-four hours. The weather being very hot and the location unhealthy, I sent the patient to the country to-day. She was taken to a house ten miles from the city, located on an elevated plain; soil light, dry sand.

June 24th.—Appears better; takes more food.

June 26th.—General condition worse; refuses food. Stop chloral and opium and give bromide of calcium, gr. iv. p. r. n.

July 3d.—Seems to gain very little in any way, and takes scarcely any food; irritable and restless. Pulse 130.

July 7th.—Remarkable change for the better commenced on the 5th. Appetite good and food well borne; sleeps well; less irritable, and in

all respects very much better. An eruption appeared on the 5th, of a vesicular character, covering the body, limbs and head, but more full on the face, head and lower part of the legs. This eruption was peculiar from the first. The individual vesicles resembled those of varicella, but in those parts of the body where varicella is most profuse, as on the trunk, there were the fewest vesicles; and the course of the disease did not resemble that of varicella. On the face, trunk and thighs, the vesicles shrivelled and dried into thin scabs during the first two weeks. No pus was seen in them, and, when the scabs fell, a dry, smooth red base was left; no pitting. On the scalp, the scales were thicker and remained much longer on account of the hair, but nothing like pus could be discovered. On the lower part of both legs and feet, the vesicles, instead of drying away as on the trunk, increased in size and became filled with a gelatinous substance, composed largely of dark blood. When pricked, a little thin fluid would exude, but the bulla would not collapse. The base was hard, a little elevated and red. In the course of two or three months, these bullae scabbed over, and, when the scab fell off, they left hard, red nodules, which disappeared entirely in the course of about a year. The course of convalescence, from the 5th of July, was uninterrupted and the recovery was perfect.

The house in which this child was taken sick was located on low, made land, Kneeland St., Boston, and the drainage was evidently bad. No permanent improvement took place in the health till some days after her removal to the country, and then the improvement was very rapid.

The above case presents one or two points of peculiar interest; and, to me, the most remarkable fact is that recovery could follow a disease of so great severity, continued over a space of thirty-seven days. There were, it is true, periods of amendment during this time, but they were brief; the brain and spinal cord were at no time free from symptoms of inflammation or pressure. The eruption was one which could not well be classified among skin diseases, and yet it does not belong to the main disease in question. I have never seen anything exactly like it. In June, 1873, I had a case of cerebro-spinal meningitis in a child six years old, in which there was a papular eruption on the face and neck, lasting about three days, and then disappearing entirely. That case was one of very much less severity and shorter duration than the above. During the epidemic of smallpox in 1859, I had a case of varicella in a girl about eight years old, in which many of the pustules, instead of drying up at the proper time, increased in size and filled with fresh pus. When the scabs were removed, pure pus was found on a dull-red, sluggish-looking, spongy base; and, after final recovery took place, elevated scars of cicatricial tissue remained. Another fact in this case may be noticed, and that is that permanent recovery commenced with the advent of the eruption.

POISONING BY SULPHATE OF COPPER.—A man has lately been condemned to death in Paris for having poisoned two wives with sulphate of copper, administered in small doses. Both women died with symptoms of violent pain in the abdomen, and continuous vomiting. The bodies were exhumed, and submitted to an analytical chemist, who was able to determine the presence of the salt in the liver and kidneys of each subject. The sulphate of copper thus obtained was displayed at the trial upon an iron plate.

Progress in Medicine.

REPORT ON PUBLIC HEALTH.

By F. W. DRAPER, M.D.

CREMATION.

THE advocates of cremation, as a sanitary measure, find their principal opponents on the side of superstition and sentimentality. No one has as yet disproved the theoretical sanitary advantages to be derived from this method of disposing of dead bodies; but since Sir Henry Thompson advocated the revival of the custom, as a hygienic reform made necessary by the growing scarcity of ground for burials in and near large communities, many strong protests have been made, from the pulpit and in the popular press, against the adoption of a "barbarian" rite, and the surrender of the traditional Christian way of conducting funerals. The prejudice growing out of hereditary habit has thus far been the main obstacle to an extended experience in the new, yet oldest, method.

Meanwhile, those who favor cremation urge their arguments with new vigor, and illustrate them with new facts. One of the most recent contributions to the literature of the subject is by Mr. W. Eassie, the Secretary of the London Cremation Society (*British Medical Journal*, Aug. 1, 1874). Mr. Eassie points out the positive evils for which inhumation is answerable. He shows that the foetid air exhaled from the dead is fatal, if breathed in a concentrated state, and that even when dissipated and diluted by the wind, it lowers the vital powers of the community. He cites many cases where evil and even fatal results have attended exposure to the noxious exhalations of grave-yards. Grave-diggers and sextons have furnished many examples of slow or rapid blood-poisoning, as a consequence of their occupation. The danger of inhaling the atmosphere of churches under which vaults are used for interments is alluded to. The emanations from decomposing bodies will rise to the surface through eight or ten feet of gravel, the very soil preferred for burial purposes.

The danger of the infection of water supplies situated adjacent to burial grounds is insisted on by the writer, and is confirmed by many well-authenticated instances, which he quotes. The organic matters resulting from decay have been traced to cemeteries a very considerable distance away. Dr. Pietra Santa discovered an instance in which a number of springs, supplying water to a village, were contaminated by the percolation of putrefactive matters from a cemetery, situated at a distance, and states that, eventually, a general epidemic was produced, in consequence of the exposure.

These conditions, as well as the need which is constantly and increasingly felt, more especially in larger cities, for more room for cemetery purposes, make the matter of repudiating interment, and of substituting some other method, one of great consequence in its sanitary bearings. The writer shows that embalmment is impracticable and undesirable, that petrification is a failure, that sea-burial has no reasonable recommendation, and that cremation is all that is left to choose. Both in the ordinary necessities of civil life, and upon the

field, after battle, cremation fulfils all the demands of public health without the sanitary disadvantages attached to the burial of the dead.

An instructive paper in the *Gazette Médicale de Paris* for May 23, 1874 (translated in the *Chicago Medical Examiner*, Aug. 1, 1874), presents descriptions of the apparatus which has been tested for carrying cremation into practice. The writer says: "The technical result to be obtained is the resolution, as speedily as possible, of the organic substance of bodies, into the final and inoffensive products of combustion, and to avoid all intermediate reactions which offend the nostrils and injure health. The procedure should produce no disagreeable impressions on survivors, and should accord with that reverent respect due to the mortal remains of those who were dear to us in life." For the attainment of these ends, it has been found that no arrangement promises such a measure of success as that invented by Siemens. This apparatus consists of a series of chambers or regenerators, by means of which the air becomes super-heated, so that when it reaches the combustion-chamber, containing the body, it has attained a temperature which effects speedy and odorless consumption of the organic matters with which it comes in contact. The time requisite for the cremation of a human body by this process is one hour, and the expense is estimated at less than a dollar for each corpse. The writer describes other processes, which have been tested, as, for example, those of Polli, of Milan, and Gorini, of Lodi, but none of these fulfil all the requirements so well as does Siemens's regeneration system of calcification.

A recent article in the *Abeille Médical*, of Belgium, charges cremation, as practised in India, among the Hindoos, with disseminating the cholera-poison, the gases which arise from funeral pyres being loaded with cholera-germs, and transported by the wind to distant territory. In contrast with this view is the statement of Mr. Long, for thirty years a resident of Calcutta (*British Medical Journal*, Aug. 1, 1874), who says "the Mahomedan burial-grounds there have long been a crying evil, and the nurses of cholera, fever and dysentery." The Moslems practise a shallow burial of their dead, and it is of frequent occurrence in the outlying cemeteries that the corpses are disinterred by jackalls. Mr. Long eulogizes the customs of the Hindoos, on the other hand, who, at the expense of a few shillings, burn the dead "out of their sight."

DISPOSAL OF NIGHT SOIL.

Until it is made compulsory upon urban house-holders to discharge all the sewage of their houses into properly-constructed drains, and thence into sewers, vaults will continue to vex the patience of sanitary authorities, and to contaminate the atmosphere of whole neighborhoods. Not the least important problem in the supervision of the excrementitious products of thickly-settled communities is how to remove the contents of vaults with decency, and with the least offence. The traditional night-cart, with its appendages of open tubs and buckets, is vanishing only too slowly before the more improved methods, adapted from the French system of odorless excavating. It is to be hoped that, before long, the old-fashioned way will be entirely supplanted.

The dry-earth system promised excellent results at the outset, but

it has found practical obstacles in the care and vigilance rendered necessary to prevent the development of nuisance in connection with it. Latterly, however, a new impetus has been given to this principle of deodorizing by what is known as the "Dalmuir System" of utilizing night-soil. This method was described at length in a paper read by Prof. T. Sterry Hunt before the American Association for the Advancement of Science at its meeting in August, of this year. The method was devised by Mr. Stanford, an English chemist. Charcoal, obtained from the charring of sea-weed, or of ordinary street-sweepings, is used as the deodorant, only one-fourth of this agent being needed as compared with dry earth. The odorless and partially dried mixture of charcoal and excrement is removed, from time to time, from the houses where it collects, and is subjected to a red heat in close vessels, like gas-retorts. The products of this process are water, ammonia, acetic acid, tar, gas and charcoal, the latter being augmented in bulk as compared with the original quantity. This dry charcoal may either be used again to deodorize, or may be utilized as manure, the accession of phosphates to it giving it much value for this purpose. Acetate of lime and sulphate of ammonia, also, are products of the distillation, and are in demand as fertilizers. It is noteworthy that the experiment, carried on at Dalmuir during the last three or four years, has been a source of profit to the company which manages the process, and of health to the community which supplies the materials.

COMMON CARRIERS AS THE PORTERS OF DISEASE.

Assistant Surgeon Ely M'Clellan, U. S. A., writes, in the *American Practitioner* for August and September, concerning the transportation of contagious diseases on the lines of railroad and steamboat travel. The writer shows how the trains of passenger-cars may carry infection from place to place, and serve as a ready medium for the dissemination of epidemics. The plush covering of the seats offers an asylum to contagion in its meshes, while the mis-named *salon* at the end of each car affords facilities for the distribution and transportation of disease. The commode in this latter apartment is so constructed that the dejections of passengers fall directly on the ground, whence, in certain favorable situations, they may contaminate water-sources by surface drainage. Moreover, the water-supply of the cars themselves is strangely misplaced in most cases; the reservoir or water-cooler is half within the saloon above mentioned, and exposed to the unwholesome exhalations of the apartment.

Again, the writer severely criticizes the arrangements in the sleeping cars, and points out the fact that the means provided to secure the comfort of travellers may become the source of disease to them. Besides the defective ventilation of the cars, and the scanty allowance of air-space to each sleeper, danger to health arises from the facility with which persons sick from contagious diseases may secure passage in sleeping berths.

Some remedies are indicated for the improvement of this condition of things on railroad cars. The reservoir of drinking-water should be at the unoccupied end of the car; the urinals and commode should be so constructed, as regards material and plan, that frequent disinfection and cleansing may be practised; the bedding of all Pullman cars should be placed in a temperature of 250° at the end of each trip on

which it is used; the heavy, woollen curtains should be dispensed with, and lounges should be substituted for beds, so that disrobing, partial or entire, should be discouraged among passengers.

The writer alludes to other ways in which common carriers may transport contagion through clothing and other baggage conveyed from point to point.

Steamboats may also become the agents for the diffusion of cholera, smallpox, and other diseases in a manner analogous to that above described. The deck passengers on the western river-steamers have inadequate closet-accommodations, as well as scanty travelling conveniences; they pay for nothing but their passage, and at night lie exposed on the baggage of more favored cabin passengers. The contagious disease may remain latent and incubating during the passage, or it may break out on the route and the patient may readily infect the merchandise or baggage on which he rests.

ARSENICAL POISONING BY WALL-PAPERS.

Renewed attention to this subject has been called by Dr. George Johnson, who has given an instructive and extended view of this source of disease in a lecture, published in the *Sanitary Record* for July 4 and 11, 1874. The writer cites a number of cases of poisoning, in which the symptoms were defined, and the exposure unequivocal. The inhalation of the arsenical dust (arsenite or aceto-arsenite of copper) mechanically separated from the paper on which it is laid as a pigment is considered the most probable source of the affection; the theory of chemical decomposition and the evolution of arseniuretted hydrogen or other noxious gases is not accepted.

The writer replies to objections that exposure to arsenical wall-paper is not uniformly followed by bad effects, by the statement that all cases do not come to the light, that many cases fail of detection, or are diagnosticated erroneously, and that very much depends on the idiosyncrasy or susceptibility of those exposed. A comparison is instituted between "hay-fever" or autumnal catarrh, and this variety of arsenical poisoning; just as most persons tolerate the pollen, or the parasite, which excites the former, so, also, the majority of people bear the presence of a small amount of arsenical dust in the air without developing the symptoms of chronic poisoning. Perhaps it would be better for the public safety, and would more speedily rid the market of the dangerous material, if there were a more general susceptibility. The writer very properly calls attention to the fact that the arsenical greens assume the most deceptive shades when combined with other colors, and that the poisonous substance may be found not only in the bright green papers, but in the pale green, gray, and even blue or brown hangings.

Hamberg has conducted a series of experiments on the air of a room hung with arsenical paper (Schweinfürt green) and has come to the conclusion that the poison exists in the air, not as dust, but as a gas, probably arseniuretted hydrogen (*Nordiskt Medicinisk Arkiv*, vi., 1874; *Medical Record*, Oct. 1, 1874). His apparatus was as follows:—

a. A U-shaped tube for the reception of the dust. b. Three similar tubes, filled with cotton, to completely separate the solid particles of arsenic from the air. c. Two bulb apparatuses, containing a solution of nitrate of silver, to collect any arsenic present as gas in the air.

d. Two gasometers, of fourteen litres capacity, alternately filled with water, to supply an aërial current.

The air was drawn through this apparatus, during a full month. In the course of the experiment, the solution of nitrate of silver gradually deposited a black precipitate, from which the characteristic arsenical ring was obtained by the Berzelius-Marsh apparatus.

CONTAMINATION OF AERATED WATERS.

A new source of lead-poisoning is pointed out by a contributor to the *British Medical Journal* of Feb. 14, 1874. He suspected the presence of lead in the potassa water which is sold in the ordinary syphon bottles so well known in this country for the dispensing of soda-water and the aërated mineral waters. He believed that the lead was derived from the metallic cap through which the water is discharged when used, and accordingly he placed a number of bottles of the suspected fluid in the hands of an expert chemist, who found lead in all the samples. Six syphon bottles of potash water, one of soda and one of seltzer were examined. In two instances, zinc was found with the lead. There was quite enough lead found in either one of the specimens to undermine health if the water were taken continuously.

Confirmatory evidence of this source of lead-poisoning is furnished by Mr. Wilson, who relates an actual case under his observation (*British Medical Journal*, Aug. 29, 1874). The symptoms of lead-disease were pronounced, but the source of the poison was not apparent at first. The water-supply of the house was tested and acquitted. At length, it occurred to the attendant that soda-water had been prescribed to be taken freely; and it was found that the patient had been taking the water to the extent of six or seven bottles daily, and that previously to her illness she had used it freely as a beverage. On analysis, the soda-water betrayed the presence of lead unequivocally, a gallon of the liquid giving nine tenths of a grain of the metal. Dr. Wallace, the chemist who analyzed the water, says, in his report, that a person taking forty ounces of the soda water daily "would thus be swallowing about a quarter of a grain of lead—a quantity far more than enough to give rise in a week or two to symptoms of lead-poisoning. Ordinary drinking water is considered dangerous if it contains one tenth of a grain of lead per gallon."

Those who prefer to imbibe their soda-water from syphon bottles in private, will be interested not only in the foregoing exposure of the risk they run, but also in another, and scarcely less important, fact concerning the same beverage. It has been ascertained by Dr. Lankester (*London Medical Record*, Sept. 2, 1874) that much of the soda-water of commerce is open to suspicion because of the presence of organic impurities. He tested six samples of the bottled water bought at druggists' and found a "considerable quantity of organic matter," with the residue of carbonate of soda. None of the samples proved to be what they pretended with reference to the amount of soda in solution.

RATE OF MORTALITY IN FOUNDLING HOSPITALS.—"In Foundling Hospitals, at least one child in every two dies, while in that of Irkutsk, the rate of mortality during a period of two years amounted, according to Cochran, to 100 per cent., not a single child being found there over one year old."—*Ziemssen's Handbuch*.

Bibliographical Notices.

Transactions of the Medical Association of the State of Alabama: Twenty-seventh Session, 1874.

THIS volume of Transactions is a credit to the Association under whose auspices it was published. In the character of the scientific papers, in the tone of the formal addresses, in the tenor of the business proceedings, even in the typographical appearance of the book, we see evidences of a mature vigor, an enthusiastic purpose and a progressive spirit, which we can heartily commend as worthy of emulation. It is exceedingly gratifying to bear witness to such enterprise. It is to be remembered that the war-cloud has hardly cleared away from the Southern sky, and that the medical profession in the South bore much of the burden, and still share many of the consequences, of the strife, so that it is especially noteworthy that this Alabama Medical Association can issue a volume of Transactions that would do credit to the most favored medical community.

We give a passing word to the organization of this Society, inasmuch as it presents some novel features. Unlike the State medical bodies with which the New England profession is familiar, and which are designed to include as many regular physicians as may be, in order to establish a standard of regularity in practice, the Alabama Society is composed of a permanent house of counsellors, numbering, at the maximum, one hundred members, and of delegates from district or county Branch Societies, the proportion being fixed. Thus, the membership is limited, and the best men in the profession appear as representatives. In many respects, the organization resembles the double legislative body of the National Congress. In all matters of ethics, of professional dignity, and of public medical policy, the Association utters its opinions emphatically, sensibly and hopefully.

The address of the President, Dr. Ketchum, introduced the deliberations of the three days' session. Its subject was the obligations of the medical profession with reference to the sanitary needs of the people of the State. Although largely devoted to an argument in favor of sanitary legislation in Alabama, urging measures which should bestow on the physicians of the State the legal authority to accomplish much needed work in the field of public hygiene, the discourse contained very much of general interest to sanitarians. Exposed, as this Southern community is, to incursions of yellow fever in addition to the epidemics which do not depend to such a degree on climatic influences, we cannot wonder that the medical profession demand the establishment of more and better sanitary precautions. In Dr. Ketchum's address, there are to be found many convincing arguments in favor of a well-regulated, scientific administration of State Medicine.

Dr. Michel contributed an exhaustive report on the Epidemic of Yellow Fever in Montgomery, during the summer of 1873. The cases of the disease numbered between four and five hundred in a population of eighteen hundred. The mortality was over twenty per cent. It was observed that, during the prevalence of the fever, the city was exempt from other diseases, and especially from malarial disorders. The writer considers the disease called "dengue" as a mild or modified form of yellow fever. It was noticed that almost all the cases of yellow fever occurring among females were accompanied by uterine hæmorrhage. In the matter of treatment, the essayist remarks: "The profession here, generally believing the disease self-limited, seldom resorted to medicine." The epidemic subsided with the first frost, thus illustrating an old observation.

Dr. Cochran offered a long paper on the general course of the Epidemic of Yellow Fever, which visited the South so extensively in 1873. It is a comprehensive history of the incursion, whose ravages, it will be remembered, were so terrible in Memphis and Shreveport and New Orleans. The report

contains many facts of great interest to sanitarians, as well as to those who have to deal with the dreaded disease hand to hand. As conclusions to be derived from the epidemic, the writer states that, in his belief, yellow fever is an exotic disease, transmitted by direct importation; that quarantine, though in its theory good, is only partially effective, because of well recognized practical difficulties; and that disinfection was a failure as a prophylactic measure.

Dr. Cochran contributed a second paper, the subject being the white blood corpuscles, in health and disease. The essay is an elaborate discussion of the chemical and physical characters of the white blood corpuscle, with a review of what is known concerning its physiological relations.

Dr. Anderson discussed the pathology and treatment of Dengue; he considers it a disease having special intrinsic characters, pointing to impaired nervous function, and in no way allied to yellow fever.

Dr. Bryce, the Superintendent of the Alabama Insane Asylum, made a strong plea in favor of State aid to hospitals; he urged the establishment of State Asylums for the insane, for the idiotic, for the deaf and dumb, and for inebriates. He also advocated State Medical Schools as a remedy for the deplorable laxity into which medical education has fallen in some sections. In this direction, his arguments do not appear convincing; we cannot quite accept his conclusion that the much desired reform would follow in the wake of State Endowments. Let the established medical schools carry out the reform already inaugurated, and there will be no need of State interposition. Moreover, the established schools will presently see that financial fortune does not rest alone on those which make the curriculum easy and graduation a farce; but that the college which makes its diploma a valuable acquisition, in all its respects, will not lack applicants for its courses of study.

A number of other papers and reports were read, all of them interesting, some of them very valuable as original observations, but our space will not permit any extended review of them.

It must be seen from the number, the variety and the character of all these papers, that the Alabama Medical Association sets its standard of excellence very high. These transactions forcibly illustrate the fact that medical enterprise and scientific attainment are not matters of monopoly, and that no section, however favored, can claim exclusive possession of wisdom.

Archives of Dermatology; a Quarterly Journal of Skin and Venereal Diseases. Edited by L. DUNCAN BULKLEY, A.M., M.D. New York: G. P. Putnam's Sons.

THIS new journal has appeared promptly according to the announcement. The Editor has enlisted, as co-workers, many of the specialists in these two branches of medicine in New York, Philadelphia and Boston, and there should be no reason why it may not be successful. His purpose is to adapt it to the wants of the general profession and to give it a practical character, while it is intended to record also all that is new and valuable in cutaneous and venereal diseases.

The subject-matter is arranged much after the manner of the *Vierteljahrsschrift für Dermatologie und Syphilis*, as follows:—I. Original Communications. II. Transactions of the New York Dermatological Society. III. Clinical Reports. IV. Extracts and Translations. V. Digest of Dermatological Literature. VI. Reviews and Book Notices. VII. Correspondence and Miscellanies.

The first number contains several interesting communications, and the work under its various divisions seems, on the whole, to have been carefully done, although some looseness, inevitable, perhaps, at the start, is apparent in the arrangement of the subject-matter. Its appearance is handsome. We trust that it may receive a generous support from the profession throughout the country.

The Medical Register for Massachusetts. By F. H. BROWN, M.D. 1874.

EVER since the publication of the *Medical Register*, in 1873, a want has been felt among the profession for some similar work, which should take a wider range and include the whole State. It is a matter of congratulation that the same gentleman who so ably prepared the *Boston Register* should have undertaken the supervision of the book which has just been published. It forms even a more complete register of the State than the other did of the city.

A complete list of all the Medical Associations and Societies throughout the State is given, together with a list of officers, times and places of meeting, and a brief sketch of each. A list of all the hospitals and dispensaries follows, with the names of the medical and surgical staffs of each, and, what is of far more importance, the object for which each was established, and the method of obtaining the admission of patients. The various benevolent and charitable associations and asylums are also given, with full particulars as to the admission of inmates, and the names of officers. Then follows an alphabetical directory of the Massachusetts Medical Society, giving the residence, date of admission to the Society, the date of academic and professional degrees, official positions held and the various books and articles written by each member. A local list is also given, in which, under the name of each town and city in the State, are placed the names of members of the Society residing there.

A large amount of very valuable miscellaneous matter is also given, such as the rules and regulations of the Army and Navy medical service, the Pension Bureau, the statutes and ordinances affecting physicians and others in their relation to the State and local Boards of Health, besides a great deal of information on many kindred topics, which medical men are frequently asked about, but are rarely able to answer satisfactorily.

Like its predecessor, this book is very valuable; and while its author does not claim perfect accuracy in its pages, he may with justice take to himself the credit of having prepared a work which will be sought after and frequently consulted.

SLIPPERY ELM BOUGIES.—Dr. J. D. Moncure recommends the use of bougies prepared from the ordinary slippery-elm bark found in the drug stores, in the treatment of organic stricture of the urethra, considering the instrument preferable to all others for the following reasons:—

1. It can be more readily introduced than any other, because it is self-lubricating, and can be made as small as needed.
2. It is safest, because so flexible that, when properly prepared, it is impossible to inflict any injury.
3. It is the quickest in its action, as, like the sponge-tent, though in a less degree, it absorbs the moisture, and while in the stricture dilates the opening to almost double its original size.
4. It is far less irritating, and, indeed, is sometimes soothing to the inflamed mucous membrane.
5. It can always be introduced into any stricture through which the smallest continuous stream of urine can pass.
6. It requires no special amount of skill on the part of the operator to secure its introduction.—*Virginia Medical Monthly*, Sept. 26.

EMPLASTRUM HYDRARGYRI IN SYPHILIS.—Prof. Doutrelepon recommends the local application *emplastrum hydrargyri* in cases of syphilis. He states that he treated most of the external symptoms with this plaster, and with the best results. In indurated chancres he observed, that, under the influence of this plaster, the base of the ulcer rapidly cleared up, while from the periphery a process of cicatrization was quickly established, the induration meanwhile disappearing.—*Allegm. Med. Centr. Zeitung*.

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Boston Medical and Surgical Journal.

BOSTON: THURSDAY, OCTOBER 29, 1874.

WE are happy to report that the most gratifying success attends the movement for the new building for the Medical School. The meeting was all that could be desired, the speeches were eloquent, simple and to the point, and the committee well chosen. At the close, there was much enthusiasm.

The meeting has been reported so carefully that we think it necessary to give only a brief account of the proceedings. Ex-Governor Clifford, who presided, remarked that he might stand as an impartial witness of the purpose of the meeting. He deplored the neglect under which the school had suffered, in spite of its great merits and the services it had rendered. "If the School," he said, "had given but one Jeffries Wyman out of its 2,400 graduates; if, setting aside the bright names of the living and the dead, it had done nothing more, it would be entitled to the efforts of the community." President Eliot made an admirable speech, which he began by explaining that the movement originated with the profession, not with the authorities of the University. He detailed the progress which the School had made and dwelt upon its needs. He was particularly emphatic on the exposure of the Museum, concerning which we give his own words:—

"Our second need is to provide a safe deposit for one of the most precious anatomical museums in the country—one of untold value. I have been asked, why not insure the museum, so that when it is burned you can replace it? You might as well talk of insuring the Sistine Madonna. The loss would be irreparable. You could not replace it. We have already suffered much in this country from the destruction of medical museums. I am filled with apprehensions whenever I go to that building, at the immense risk of fire. There is but one mode of securing the collection, and that is by depositing it in a fire-proof building. We ask money for this specific purpose—to secure this museum, which has been the fruit of so much labor and devotion."

Dr. Holmes followed with a very eloquent address that will be long remembered, by those that heard it, as a very happy effort. We must be permitted to quote at some length from the part showing the claims which the profession has on the public:—

"The physician's life is one of sacrifice. He gives up not only his ease, if necessary, his health, and even his life, but what is dearer to some men, I might almost say, than any of these, namely, his habits. He drops his novel with the last chapter unread; he leaves the theatre with the fifth act just working itself up to agony; he gets up from a meal that is untasted; he leaves his pillow unpressed, or springs from it in the dead of night to brave the wildest storms of rain or snow; he has not an hour by night or day when you cannot summon him as if he were a slave, and you were his master. He does more than the good Samaritan—he goes to the wayside to look for the wounded travellers and carries them in his ambulance to his hospital, which

is an inn where there is no landlord to pay. He will stoop to wash your feet, if you are bruised and maimed, and do for you more than menial service at the call of humanity.

These are his sacrifices—what are your gains? The surgeon is constantly saving life. Where would you be without his aid in a case of strangulated hernia?

"And in woman's special hour of anguish, what do not she and those that love her often owe to the skill and care by which two precious lives are guarded or rescued? If the physician has not so often as the surgeon or the obstetrician the certainty that he has saved his patient from impending death, he cannot doubt that the measures he has taken not very rarely turn the uncertain balance in his favor.

"As our cities grow larger and more densely populated, every year adds to the dangers arising from local causes of disease. We know too much of this practically here in Boston, where the death-rate is higher, I believe, than in any of our northern cities. We know, also, the diligent labors of our State Board of Health in the investigation of the sources of sickness and mortality, and their suppression. We have good reason to hope that their efforts will, if seconded heartily by the authorities, result in a great improvement in the health of a city which has prided itself on its freedom from malaria, and its care of citizens.

"To have good surgeons, obstetricians, physicians, boards of health, you must have good medical schools, and sound methods of instruction. We make no secret of the fact that we are not satisfied with the methods of instruction which were long followed in this school, and which prevail very largely throughout this country at the present day. They were as good, perhaps, as could have been expected in a new country, but Massachusetts is not a new country, at any rate, and Boston is not a new city, and Harvard University is the oldest in the land. Its medical department has taken the lead in the great educational reform, the leading aim of which is to send into your families men who shall be more able to help you in your hour of pain and danger, to make the coming into life and the going out as nearly like the hours of waking in the morning, and of closing the eyes in slumber at night as is permitted by the conditions under which we come into being."

Dr. E. H. Clarke regretted that the movement had not been made earlier, but explained that, while the old system lasted, delicacy did not permit the Faculty to take any part in it:

"Under the old régime, the college was made to contribute to the pockets of the professors in accordance with the number of students they graduated; and to ask for money to build a larger school was equivalent to asking for more money for their own pockets. This has all been changed. Professors and teachers stand on the same footing as in other departments. Much of the teaching is gratuitous. A better course of teaching is now carried on than in any other college in the country."

The Rev. E. E. Hale showed that the credit of the city is at stake to support the institution, which is one of its greatest honors. He said, "the truth is, that our reputation as a place where medicine is taught, and well taught, is far too precious to be put in question." And again: "We mean that the young men of New England, as they seek medical education, shall find here as good as they can find anywhere. We will enlarge our resources till, for every man, that shall be true."

Before the close of the meeting, a committee of fifty was appointed, which subsequently elected Dr. J. Collins Warren, Secretary, and prepared the following address:

"The Harvard Medical School, by its new system of medical instruction, now in successful operation, has effected an improvement in this branch of education of great value to the community. The high standard now set by the school is a radical change from the old, imperfect system of education, and the degree obtained from this school is a certificate of a more thorough education than can be obtained elsewhere in this country. The new system, by greatly increasing the amount of instruction, and particularly of laboratory instruction, requires more room than can be obtained in the present building. The lecture-rooms are small in size, and few in number, and the laboratories are imperfectly appointed, and in every way unsuited to the present wants of the school. The museum of anatomy, which is, perhaps, the best collection of its kind in this country, requires more room for its natural expansion, and for the reception of gifts which would come, and, indeed, have been promised, provided a receptacle should be offered them. The danger of fire to the present building is great, and the building itself is totally inadequate for the purpose of teaching. In the opinion of the undersigned, a new building, on a new site, is absolutely necessary, to enable the school to continue and enlarge its important work, and for this purpose the sum of two hundred thousand dollars should be raised. The community is earnestly requested to aid in this undertaking.

"Contributions may be sent to George Higginson, treasurer, 40 State Street."

As we have already said, the movement is going on in the most satisfactory manner, the community is responding nobly to the appeal, and there is no reason to doubt the success of the undertaking. To attain this as soon as possible, we would urge all members of the profession to lend their aid and to coöperate with the committee. We hope that the graduates of the school, both in Boston and elsewhere, will remember their Alma Mater, and, in proportion to their means and influence, give her the assistance which shall open to her even a higher career than that of the past.

A LONG step forward was taken last week in behalf of the public health of Boston. A communication was received by the Aldermen from the Committee on Sewers, calling attention to the danger to health in certain parts of the city, caused by furnishing a copious supply of aqueduct water before any provision is made for the equally copious waste and sewage produced in consequence. The soil around dwelling-houses ordinarily absorbs the sewage of the inmates when the water used is pumped from wells, but when the supply comes from the public water-works, the primitive methods of drainage into back yards will no longer avail, and dangerous nuisances result. The only reasonable course to pursue is that pointed out in the Committee's communication, namely, to put the sewers down before the water-pipes are laid. Such a course may savor of hardship to many suburban residents who have a prospect of years of waiting before the proper street-drains are laid in the thinly settled sections; but we believe it would be altogether the best policy to make the rule a fixed and unalterable one—that the sewers shall go before the service-pipes. The

Board of Health is well aware of the very dangerous conditions which have arisen in consequence of this indiscriminate supply of Cochituate water to houses upon undrained territory; they have scores of nuisances reported to them, in which they see abatement to be impracticable because of the blind way in which matters have been administered with regard to the relations of sewage and water. It has been observed by medical men in Dorchester that typhoid fever was almost unheard of before annexation, but that since the ground was disturbed for laying the Cochituate water-pipes, an unaccountable number of cases have developed; the water-supply was rapidly pushed forward as a deserved concession for the increased taxation to which the newly annexed territory was subjected, while the sewers await the uncertain chances of the future, the willingness of landholders to pay the expenses and the alacrity of the city departments in doing the work.

This is a matter to be seriously considered, not only in Boston, but in every community where the water-supply is in common by means of aqueducts. Many of the cities and larger towns of this State have recently shown a commendable enterprise in introducing to their inhabitants an abundant gift of pure water, and so far they have done much to promote the public health; but the gift will carry fatal consequences with it unless coincidently the most liberal policy with regard to drainage is carried out. We wish the matter might be compassed by statute, compelling the establishment of efficient drainage as an antecedent condition to the taking of water from a common source of supply. And we wish, also, that the various departments of public service in every city were less at loggerheads in promoting the public good.

THE ANTISEPTIC PROPERTIES OF SALICYLIC ACID.—This acid can be readily composed from carbolic acid and carbonic acid; and, on heating above the boiling point, it is decomposed into these substances. Professors Kolbe and Thiersch have made experiments concerning its power to oppose processes of fermentation and putrefaction, and to prove a good antiseptic.

To ascertain how salicylic acid acted on ferments, some amygdalin was dissolved in water, a small quantity of the acid was then mixed with the solution and an emulsion of sweet almonds added. In a quarter of an hour, by which time a second mixture of almond emulsion and amygdalin without the acid smelt strongly of bitter almond oil, the mixture containing the acid had not the least trace of such a smell.

Mustard-seed powder, which, in luke-warm water, soon gives a strong smell of mustard oil, gives no such smell if a very little salicylic acid be previously mixed with it.

If a solution of grape sugar be mixed with a little salicylic acid (a thousandth part at the most), yeast has afterwards no action, and a sugar solution already in fermentation ceases to ferment when a small quantity of the acid is added. A thousandth of salicylic acid added to beer suffices to preserve it from injury through fungus growth.

Fresh and pure cow's milk, with 0.4 per cent. of salicylic acid added, and left in an open vessel, at a temperature of 64.4° Fahr., was thirty-six hours

later in curdling than an equal quantity of the same milk beside it, which was without the acid. The action of a little acid delays the souring and coagulation still longer. The milk continues to taste well; the taste of the small amount of acid is not perceptible.

Fresh urine is kept from decomposition by the addition of a small quantity of salicylic acid.

Fresh meat rubbed with the acid will keep for weeks in the air.

Prof. Thiersch has made some experiments in the Leipzig Hospital as to the antiseptic action of salicylic acid, and its use in surgery. He says that when strewn (either by itself or mixed with starch) on contused wounds not yet cleansed, and on scurfy, gangrenous surfaces, salicylic acid destroys for a long time the putrid odor without any inflammatory action of importance. In solution of one part of the acid, three parts of phosphate of soda, and fifty parts of water, it favors the coating over of granulation surfaces. In its application to fresh wounds, Dr. Thiersch is of opinion that salicylic acid has all the advantages of carbolic acid without its inconveniences.—*The London Medical Record*, Sept. 23, 1874.

In the *Berliner Klinischer Wochenschrift*, No. 15, 1872, appeared an article by Prof. Dr. Beneke, of Marburg, "On a substitute for Animal Food for Convalescents, in various Diseases of the Stomach and Intestinal Canal, and for Poor Patients." H. Hartenstein was induced by the above article, and following the suggestions therein contained, to prepare for sale, under the name of "Leguminose," a powder for making soup, composed of a mixture of leguminous and cereal meal.

In an article in the *Berliner Klinischer Wochenschrift*, 1874, No. 22, Prof. Beneke expresses approval of the Leguminose as practically fulfilling every indication for which it is intended. It has been established beyond a doubt, by careful chemical analysis, that meals of all kinds contain a large amount of nourishing matter, pure leguminous meal being not far behind beef in this respect. Being freed from any shreds of cellulose and reduced to the very finest state of subdivision, this preparation has been made of extremely easy digestion. In addition to its highly nutrient properties and easy digestibility, its great cheapness should not be left unmentioned, the cost being only 15 groschen (34 cents) per pound, which renders it very useful as a diet for the poorer classes. By the admixture of cereal meal, also very finely divided, the proportion of nitrogenous to non-nitrogenous matter is made to vary, in the four different mixtures now in the market, standing respectively as 1:2, 3:1:3, 3:1:3, 9:1:4, 8, thus being equivalent, in order, to the proportions found in beef, milk, breast-milk and the mixed food of adults. It is shown, by most careful analysis, that the different kinds of meal contain 10 to 12.7 per cent. water, whereas beef contains nearly 75 per cent., and cow's milk 86 per cent. One pound of fine meal contains, therefore, three and one half times more solid constituents than meat and more than seven times as much as cow's milk.

The method of preparing the soup for use is to stir slowly a heaping tablespoonful of the powder in a soup-plate of water, and then boil thoroughly for half an hour and add salt. The taste is said to be agreeable when thus carefully prepared, though should any taste of the raw peas or lentils remain behind, a little Liebig's extract of beef can be added. When this disagreeable taste cannot be got rid of, it is suggested by Dr. Beneke that the quality of water with which the soup was made may have something to do with it, and that if it is very hard a little soda should be added.

As the percentage of fat in these meals is small, the non-nitrogenous elements being mainly represented by amylum, it is recommended, when fat is particularly indicated, as in atrophied children, consumptives and convalescents, to add to the prepared soup one to two teaspoonfuls of cream. When, for instance, the proportion of nitrogenous to non-nitrogenous matter desired is 1:3, 3, Dr. Beneke employs mixture 1 (1:2, 3), adding the cream as above.

With regard to the objection, which naturally suggests itself, that leguminous articles of diet cause flatulency, no mention is made by those who have used it of any such trouble having been produced, and it probably only occurs when the peas or beans are prepared in the ordinary way.

After the second year, the system requires a small quantity of vegetable acid or of salts containing it. As leguminose contains none, when this is used exclusively, the deficiency should be made up by giving lemonade, compote, fruit jelly or wine containing it. When the stimulating effect of animal food is indicated, this can be obtained by the addition of Liebig's extract of beef, rich in creatinine and the salts of potash.

Dr. Beneke, in his endorsement of the merits of the above preparation, is supported by equally favorable reports from a large number of physicians of respectable standing in different parts of Germany who have used it as an article of diet for patients with impaired organs of digestion, for infants deprived of the breast, where cow's milk is not well tolerated in any form, for atrophied and scrofulous children, for convalescents from typhoid fever, and for consumptives; also during the acute stages of disease, as of acute rheumatism and of typhoid fever.

Should it be made easily obtainable in this country, at a relatively cheap price, the leguminose would certainly merit a trial at the hands of the profession, with prospects of proving a very superior article of diet for infants and for the sick chamber.

MEDICAL SCIENCE (?) IN SPAIN.—A correspondent, writing from Madrid, gives an account of a few of his patients, and the course of treatment to which they had been subjected prior to having consulted him. He says that one of the prescribers of the nastinesses described is an ex-Court physician, and that another fills a professorial chair.

CASE I.—D. F. L., aged 35, having chronic, articular rheumatism, was ordered nine days' baths of archena; after that, to observe the "Cuarentena" (or forty days); to take no medicine whatever. Being worse than ever at the end of that period, he was ordered friction all over the body with a slush composed of equal parts of smashed earth-worms, rancid oil, and putrid mule's dung, to be applied assiduously for the mysterious nine days, night and morning.

CASE II.—Senora B. de L., a "noble lady," aged 32, recently confined, had a small abscess of the left breast. She was attended by an ex-Court physician, who, when he had exhausted all his remedial skill, ordered a poultice three times a day of white pigeon's dung, saying that if that did not cure her, nothing else would.

CASE III.—Dona Francena A., aged 23, had been treated for dyspepsia with amenorrhœa for ten months. Her last prescription was "nine days" poultices of fresh human excrement. She could only endure this disgusting barbarism two days.

CASE IV.—Eulogia G., a servant-girl, aged 19, had chronic diarrhœa, and was ordered to take a tumblerful of child's urine every morning, fasting, for nine days. She could take such a dose only three days.

CASE V.—Pablo Insari, aged 30, plasterer, had had six months' doctoring for heart-disease following rheumatism. The last prescription was a newly killed pigeon split open down the middle and applied over the left chest for "nine days," and to go to work.

CASE VI.—Senor Don M. H., mine-proprietor, aged 39, had cardiac dropsy. His last prescription was, a sheep to be killed daily, and the skin, with the wool on, to be wrapped round the body tightly.

CASE VII. is, perhaps, the strangest and most ridiculous of all. Miss S. A., an American lady, sent for me, and said, "Doctor, I've got the gripes for the last two or three days; and yesterday, feeling no better, according to a notion in my country (Pittsburgh), I took eight or ten black pepper-corns, wrapped them up in a piece of your *London Times* (they must be swallowed in printed paper). I guess that they have stuck somewhere, and I feel awful bad; and I want you to give me something right off to get me rid of them

pepper-corns and your English paper. Had I only got the *New York Herald*, they would have gone slick down." A small dose of castor-oil shortly set her right.

By way of confirmatory evidence, our correspondent gives the following literal translation of a paragraph in the *Correspondencia* journal:—

"In the slaughter-house of Madrid, which is under Government supervision, there is being committed a repugnant abuse, which, for the sake of health and public decency, and at the request of many persons, we denounce to the Senor Alcalde (Chief Civil Magistrate) of this city. In the above-named establishment, they consent or permit that the sick, with arms and legs at times full of ulcers and wounds, to lie inside the carcasses of animals while hardly yet dead. Apart from the horror and disgust that this produces in the persons that witness these things, it might produce disastrous effects on the public health; and we doubt not that such scandalous acts will have an efficacious and prompt correction. We shall be on the look-out about this matter."—*The British Medical Journal*.

Correspondence.

CAUSE OF TYPHOID FEVER.

MESSRS. EDITORS,—In the JOURNAL for October 15th, you quoted Dr. E. M. Snow's views upon this topic, which, if not ignoring "foul emanations from sink drains, cess-pools and privy-vaults" as an active agent in producing typhoid fever, places them in a somewhat trivial light. A few facts, already well known and published will, I think, give your readers a different opinion (at least in part) from Dr. Snow's. In the JOURNALS for Sept. 14th, 21st and 28th, 1865, may be found the elaborate "Report upon the Epidemic occurring at Maplewood Young Ladies' Seminary, Pittsfield, Mass., in July and August, 1864." The facts in this notable case are most ably set forth, by Drs. Palmer, Earl and Lord, the investigating committee, and no one can doubt but that *fifty-six* (56) persons, out of *one hundred and twelve* (112) who resided in the Institute, had typhoid fever as a direct result of foul emanations from neglected cess-pools and privy vaults; of the *fifty-six*, sixteen died. Ten or twelve others were ill, but their cases are not reported as typhoid fever, although the history strongly points that way. All interested in this important subject should recur to the JOURNALS mentioned above, or procure the report in pamphlet form. In the JOURNAL for Feb. 4th, 1869, may be found a discussion upon the causes of typhoid fever by members of the Boston Society for Medical Improvement. A number of instances corroborating the idea that this disease does arise from foul exhalations are cited. Some doubted, because a leaky drain was not always discovered; but, "Dr. George Derby thought we were not justified in the conclusions that no local cause existed, because none was found at the first search; a more careful examination frequently revealed an accumulation of foul material that had previously escaped notice." The case of the Clifton House was referred to. Of more recent date is the sickness that took place at Mt. Desert, Maine. Dr. Snow must have heard of the cases of typhoid fever, and their ascertained cause, that occurred in an institution of learning not many miles from his own residence. It was the "Maplewood Fever" over again; there being, however, only about a third as many sick ones. Two years since, I had five cases of typhoid fever in one house at the same time. There were neither rotten apples nor other vegetables about the premises, but there *was* a most filthy vault, the emanations from which these persons were compelled to inhale. Near, in another dwelling, were six more cases under my care. Six cases were also under treatment by other physicians, a total of seventeen cases within five hundred feet of each other. Decayed vegetable matter was not a prominent cause in any of these; foul emanations, clearly, were the cause in the house first invaded by the disease. That decayed vegetables were also a cause, I do not doubt. In many instances of

local outbreaks of typhoid fever, we cannot fix upon a very satisfactory cause. From Nov. 1st, 1873, to May 1st, 1874, I had five cases in one family, no two ill at the same time. A most careful search revealed no local cause. It is likely there are causes we cannot understand. Dr. Snow asserts that typhoid fever is more frequent in the country than in the city. How does he know this? Furthermore, if this be correct, does it prove his premises as to causation? We think not, for, according to our experience, the vilest "back-houses," and the most abominable cess-pools are to be found in the country and villages, such as are not tolerated for a moment in cities.

Pawtucket, R. I., Oct. 17, 1874.

J. O. WHITNEY.

MESSRS. EDITORS,—The following letter, from a gentleman temporarily residing in Paris, may be considered of sufficient interest to have a place in your JOURNAL. The case seems remarkable in two respects:—1st, on account of the diagnosis of helminthia, and, 2d, in consideration of the treatment, which was followed by a cessation of the convulsions.

Brookline, Oct. 21, 1874.

S. SALISBURY.

"On Sunday afternoon, about 1.30, whilst at dinner, our dear H.* was suddenly seized with a convulsion of the most alarming and violent nature, becoming utterly rigid, eyes fixed, pupils much dilated, teeth clinched, accompanied with the most distressing gasping for breath.

"We immediately sent for a physician, and, in the meantime, put him into a warm bath, which seemed to have no effect whatever; and he could not be made to swallow anything. After the delay of twenty minutes at least, one of several doctors who had been sent for arrived, and was soon followed by two others, all of whom began the attempt to recover to life that which seemed beyond all human aid. Artificial respiration having been carried on for some time, as well as hot baths and throwing cold water in the face, one of the physicians suggested a subcutaneous injection of morphine, which seemed to relieve the violence of the spasms.

Soon after this, Sir John Cormack, the physician we had previously employed, having arrived, I turned over to him the management of the case, in consultation with the others. The case being still most desperate, and requiring efficient remedies, it was decided to again inject morphine (instruments being at hand, as a last resort, to insert a tube into the trachea). The second injection of morphine seemed very soon to calm him, and he became quite thoroughly narcotized, after having been in most severe convulsions for two hours. He fell into a gentle sleep, which lasted two hours, and then awoke perfectly clear in his mind, recognizing all of us, and from that moment has been steadily improving; and, save more or less excitement and restlessness, is quite himself again.

"The physicians who have seen this case consider it a most remarkable one in many respects, although they have known of similar ones. They are of unanimous opinion that there is no disease of the brain, heart or other vital organ, but it is to be attributed to a worm. The doctor has him under treatment for that disease.

"Later.—I am thankful to say that H. has passed a large worm and subsequently a smaller one, and is doing well.

"Paris, September 22, 1874.

HOSPITAL APPOINTMENTS.

MESSRS. EDITORS,—Not being aware that there are any vacancies to be filled in either of the hospitals in this city, it surely cannot be considered anything wrong for an outsider to say a word upon this subject. Some of us in the profession have been called upon to testify to the good standing and professional ability of one or another medical man. It is rather hard for some persons to say "no" to such an application, or to any other. One says it with the feeling that the applicant looks upon him afterwards as a personal

* Aged seven years.

enemy. The committee who have in charge nominations to fill vacancies are the individuals who should ask for an account of qualifications, and for nominations. Personal friendship, on the part of Trustees, will, of course, enter into every election for every office; and where an institution is carried on under the direction of Trustees elected by a political body, and frequently changed, political, as well as personal, friendship becomes, sometimes, an element. It is for the advantage of a hospital to have its government a permanency. This is desirable on every account. Men become interested in an institution to which they are long attached. They learn its wants. They become acquainted with its officers, and their ways of administration. They become qualified to advise and direct in its matters of finance. Although they may arrive at the age of fogginess, there are always young ones enough to counterbalance too rigid economy and to prevent elections of physicians and surgeons too old for work.

This subject of appointments has long been in the mind of the writer, who feels entitled to speak upon the subject, having himself held a hospital office, though he never asked for one. It seems to him that the following plan would be a good one. When a vacancy is about to occur, let the fact be made known by advertisement that any one *may* apply for the office who wishes, and let him send in as many names of medical men as references as he may choose, but no testimonials from his referees. The committee of nomination should be the party to seek information concerning ability, qualifications and character; and although it would be as well for an applicant to show his person, any solicitation from political acquaintances, any entreaties from family and friendly bores, should be done away with. A referee could then, without the slightest inconvenience, express his opinion concerning an applicant for a position, and his comparative judgment between two or more applicants.

Men who ask you for certificates of qualification are often very much vexed when they discover that, either before or after writing them, you have also written the same for others. This is truly a piece of self-sufficiency. That one has said that Dr. A. is qualified to do a certain work, is only evidence that he knows or thinks he knows it. It is not evidence that he has not the same knowledge of the ability of Dr. X. or of Dr. Z. His giving a certificate to that effect does not make him a partisan of Dr. A., and it would be as well, though some do not like to do so, to inform one applicant for a certificate that you are willing to furnish it, but that you have already done the same for another.

Some of the readers of the JOURNAL might prefer the system by *concours*. That will do well in some places. It has been adopted to a certain extent in one of the city institutions. On a more extended scale, we do not believe it would be either possible or useful in this country. *.*

Obituary.

SEWALL G. BURNAP.

At the annual meeting of the Thurber Medical Association, held this day, the following resolutions were passed:—

Whereas, Our brother, Sewall G. Burnap, of Holliston, has been removed from the scene of his long and useful labors on earth, and, as we trust, to a happy and everlasting home in the life which succeeds this, therefore

Resolved, That, while we bear our willing testimony to his character as a man and physician and deplore his absence from this the annual meeting of our Association, we tender to his wife and other relatives the sincere expression of our condolence and sympathy in their affliction, and commend them to the love of that Being who doeth all things well.

Resolved, that a copy of these resolutions be forwarded to the family of the deceased, the Boston Medical and Surgical Journal, and the *Milford Journal*.

J. ALLEN FAY, M.D., Secretary.

Milford, Mass., October 22, 1874.

Medical Miscellany.

BIS DAT QUI CITO DAT.

A SCHOOL of Dental Surgery is about to be formed in Vienna.

THE next Annual Meeting of the Association of German Naturalists and Physicians will be held at Gratz in Bohemia.

KIN-SI I-SETZU, or *Modern Medical News*, is the title of a new bi-monthly medical journal, published in the Japanese language at Yedo, by the imperial government. It has a guaranteed circulation of one thousand copies.

MR. GEORGE R. LABAN, 111 years old, as distinctly shown by the records of his christening, attended the State fair at Easton, Pa., last week. The old man is talkative and intelligent, has a fine chest, shows little emaciation, uses tobacco, and can do considerable work without fatigue.—*Ex.*

CHOLERA NOT INFLUENCED BY TEMPERATURE.—The cholera raged undiminished in Moscow in 1830 while the temperature was -4° F., and at Orenburg at a temperature of -24° F. In Nowgorod, in 1821, typhoid fever broke out at a temperature of -35° F., while it appeared at Edinburgh in 1817, during a period of exceptionally hot weather.—*Ziemssen's Handbuch.*

DISLOCATION FORWARDS OF THE STYLOID END OF THE ULNA.—An instance of this rare displacement is reported by Mr. T. E. Purdom in the *Edinburgh Medical Journal* (Oct. 1874), produced by having the hand and forearm drawn into a planing machine. "The hand and wrist were much twisted. On examination, the limb had a curious appearance, there being a hollow on the ulnar side posteriorly, while in front, just above the wrist, a hard swelling was felt and diagnosed to be the styloid end of the ulna, displaced forwards."

THE MAINE GENERAL HOSPITAL, at Portland, was dedicated on October 21st. Hon. J. B. Brown, President of the corporation, presided, and many distinguished people of the State were present, including the leading medical men. Gov. Dingley made an able dedicatory address, sketching its history, congratulating the people upon its completion and declaring its benefits to the suffering and to the profession. He was followed by President Chamberlain, of Bowdoin College, and others. A large concourse was present, who inspected the building after the ceremonies. Dr. Charles O. Hunt is to be the resident physician.

ANointing WITH COCOA BUTTER IN SCARLET FEVER.—Upon the recommendation of Schneeman, the anointing of the body with fat has been extensively practised in Germany during the past ten years, with the view of lowering the temperature, and hastening the desquamation. Dr. Bayles suggests, in this connection, the employment of cocoa butter, as producing a more cooling and refreshing effect upon the patient, and emitting a more agreeable odor in the sick chamber. This agent, on account of its solid consistence, is more readily applied than either fat or oil, and is more easily absorbed by the skin. Furthermore it is thought to afford the system a certain amount of nourishment.

In severe fevers, the entire surface of the body should be rubbed with this substance every hour, or at least once every four hours. Its application is also recommended in typhoid fever, in cases where the patients manifest a dread of water, or where the application of water is impossible; likewise in other inflammatory diseases, especially the severer forms of inflammatory rheumatism, and in tuberculosis. *Giornale Veneto di scienze Med., Ser. 3, Tom. 21, 1874.—Allg. Med. Central-Zeitung, 16th Sept. 1874.*

INCISION VERSUS EXCISION OF THE KNEE IN CHILDREN.—At the last annual meeting of the British Medical Association, Dr. Edward Lund argued that, in a large proportion of cases under twelve to fifteen years of age, the incision was the better operation. The mode of procedure was peculiar, inasmuch as he only opened the joint by an incision in its external side, and through this, by means of a curved cutting hooked knife, which was passed into the joint, or so much of the natural cavity as remained, all adhesions were broken down, or cut through, so as to permit the bones to be replaced in a straight line. It was rarely possible to do this immediately, on account of the construction of the tendons; but several contrivances were shown by which, by the use of elastic India-rubber bands, long-continued slight pressure produced excellent results, and firm, straight ankylosis of the knee was the result. It was, however, one essential condition of the operation that it should be conducted entirely upon Mr. Lister's system of antiseptic dressing, for without these precautions it might, in many cases, prove a hazardous proceeding.—*The British Medical Journal*.

"NOTHING NEW UNDER THE SUN."—Doctor Mordtmann, of Constantinople, publishes, in the *Gazette Médicale de l'Orient*, some curious details he has discovered in some old Oriental chronicles, tending to show that the Siamese twins, as well as the sisters Milly and Christine, had prototypes in former times. According to these Byzantine chronicles, there came from Armenia to Constantinople in the year 744, a monster, consisting of two children born of one mother. These children were attached to one another at the epigastrium, so that they faced each other, the other parts of their bodies being regularly formed. During their sojourn in the Byzantine capital numbers flocked to see this monstrosity; but as the twins were superstitiously regarded by the ecclesiastical authorities as being of bad augury, they were expelled the city, to return again when a comparatively enlightened emperor ascended the throne of the Cæsars. One of these twins died, and one of the most skilful physicians endeavored to divide the survivor from the corpse at the point of juncture, in the hope of saving his life. The operation, however, only served to prolong its duration for three days.—*The London Medical Record*.

NOTES AND QUERIES.

THE DOCTORS (OF DIVINITY) DISAGREE.—The Bishop of Lincoln says that cremation destroys all hope of a "resurrection of the body." The Bishop of Manchester finds abundant reason for believing the contrary. Meanwhile, until this important matter is settled, let us be buried in the old fashioned way and enjoy the prospect of having our corruptible part washed away into neighboring streamlets and wells. *.*

MORTALITY IN MASSACHUSETTS.—Deaths in seventeen Cities and Towns for the week ending October 17, 1874.

Boston, 133; Worcester, 18; Lowell, 24; Milford, 3; Chelsea, 4; Cambridge, 23; Salem, 15; Lawrence, 16; Springfield, 9; Lynn, 7; Gloucester, 3; Fitchburg, 1; Newburyport, 5; Somerville, 15; Fall River, 16; Haverhill, 7; Holyoke, 9. Total, 308.

Prevalent Diseases.—Consumption, 48; cholera infantum, 27; scarlet fever, 17; typhoid fever, 17; pneumonia, 15; diarrhoea and dysentery, 10.

Boston reports one death from cerebro-spinal meningitis.

CHAS. F. FOLSOM, M.D.
Secretary of the State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Oct. 24, 140. Males, 71; females, 69. Accident, 5; apoplexy, 1; inflammation of the bowels, 2; disease of the bladder, 1; bronchitis, 3; inflammation of the brain, 1; disease of the brain, 4; burned, 3; cyanosis, 1; cancer, 2; cholera infantum, 6; cholera morbus, 1; consumption, 30; convulsions, 3; debility, 3; diarrhoea, 6; dropsy of the brain, 3; dysentery, 1; diphtheria, 1; diabetes, 1; exhaustion, 1; intermittent fever, 1; scarlet fever, 4; typhoid fever, 8; gastritis, 1; gastric ulcer, 1; disease of the heart, 4; disease of the kidneys, 1; congestion of the lungs, 3; inflammation of the lungs, 3; laryngitis, 1; marasmus, 11; old age, 1; paralysis, 2; premature birth, 7; peritonitis, 2; puerperal disease, 4; pyæmia, 1; quinsy, 2; senile dementia, 1; tabes mesenterica, 1; tetanus, 1; tumor, 1.

Under 5 years of age, 58; between 5 and 20 years, 12; between 20 and 40 years, 31; between 40 and 60 years, 22; over 60 years, 17. Born in the United States, 108; Ireland, 22; other places, 10.